TGAAAGACCC CACCTGTAGG TTTGGCAAGC TAGCTTAAGT AACGCCATTT TGCAAGGCAT GGAAAAATAC ATAACTGAGA ATAGAGAAGT TCAGATCAAG 51 GTCAGGAACA GATGGAACAG CTGAATATGG GCCAAACAGG ATATCTGTGG 101 TAAGCAGTTC CTGCCCCGGC TCAGGGCCAA GAACAGATGG AACAGCTGAA 151 TATGGGCCAA ACAGGATATC TGTGGTAAGC AGTTCCTGCC CCGGCTCAGG 201 GCCAAGAACA GATGGTCCCC AGATGCGGTC CAGCCCTCAG CAGTTTCTAG 251 AGAACCATCA GATGTTTCCA GGGTGCCCCA AGGACCTGAA ATGACCCTGT 301 GCCTTATTTG AACTAACCAA TCAGTTCGCT TCTCGCTTCT GTTCGCGCGC 351 TTCTGCTCCC CGAGCTCAAT AAAAGAGCCC ACAACCCCTC ACTCGGGGCG 401 CCAGTCCTCC GATTGACTGA GTCGCCCGGG TACCCGTGTA TCCAATAAAC 451 CCTCTTGCAG TTGCATCCGA CTTGTGGTCT CGCTGTTCCT TGGGAGGGTC 501 TECTOTGAGT GATTGACTAC COGTCAGOGG GGGTCTTTCA TTTGGGGGGCT 551 CGTCCGGGAT CGGGAGACCC CTGCCCAGGG ACCACCGACC CACCACCGGG 601 AGGTAAGCTG GCCAGCAACT TATCTGTGTC TGTCCGATTG TCTAGTGTCT 651 ATGACTGATT TTATGCGCCT GCGTCGGTAC TAGTTAGCTA ACTAGCTCTG 701 TATCTGGCGG ACCCGTGGTG GAACTGACGA GTTCGGAACA CCCGGCCGCA 751 ACCCTGGGAG ACGTCCCAGG GACTTCGGGG GCCGTTTTTG TGGCCCGACC 801 TGAGTCCAAA AATCCCGATC GTTTTGGACT CTTTGGTGCA CCCCCCTTAG 851

AGGAGGGATA TGTGGTTCTG GTAGGAGACG AGAACCTAAA ACAGTTCCCG 901 CCTCCGTCTG AATTITTGCT TTCGGTTTGG GACCGAAGCC GCGCCGCGCG 951 TCTTGTCTGC TGCAGCATCG TTCTGTGTTG TCTCTGTCTG ACTGTGTTTC 1001 TGTATTTGTC TGAGAATATG GGCCCGCGGG CCAGACTGTT ACCACTCCCT 1051 TAAGTTTGAC CTTAGGTCAC TGGAAAGATG TCGAGCGGAT CGCTCACAAC 1101 CAGTOGGTAG ATGTCAAGAA GAGACGTTGG GTTACCTTCT GCTCTGCAGA 1151 ATGGCCAACC TITAACGTCG GATGGCCGCG AGACGGCACC TITAACCGAG 1201 ACCTCATCAC CCAGGTTAAG ATCAAGGTCT TTTCACCTGG CCCGCATGGA 1251 CACCCAGACC AGGTCCCCTA CATCGTGACC TGGGAAGCCT TGGCTTTTGA 1301 CCCCCCTCCC TGGGTCAAGC CCTTTGTACA CCCTAAGCCT CCGCCTCCTC 1351 TTCCTCCATC CGCCCCGTCT CTCCCCCTTG AACCTCCTCG TTCGACCCCG 1401 CCTCGATCCT CCCTTTATCC AGCCCTCACT CCTTCTCTAG GCGCCAAACC 1451 TAAACCTCAA GTTCTTTCTG ACAGTGGGGG GCCGCTCATC GACCTACTTA 1501 CAGAAGACCC CCCGCCTTAT AGGGACCCAA GACCACCCCC TTCCGACAGG 1551 GACGGAAATG GTGGAGAAGC GACCCCTGCG GGAGAGGCAC CGGACCCCTC 1601 CCCAATGGCA TCTCGCCTAC GTGGGAGACG GGAGCCCCCT GTGGCCGACT 1651 CCACTACCTC GCAGGCATTC CCCCTCCGCG CAGGAGGAAA CGGACAGCTT 1701 CAATACTGGC CGTTCTCCTC TTCTGACCTT TACAACTGGA AAAATAATAA 1751 CCCTTCTTTT TCTGAAGATC CAGGTAAACT GACAGCTCTG ATCGAGTCTG 1801 TTCTCATCAC CCATCAGCCC ACCTGGGACG ACTGTCAGCA GCTGTTGGGG 1851 ACTCTGCTGA CCGGAGAAGA AAAACAACGG GTGCTCTTAG AGGCTAGAAA 1901 GGCGGTGCGG GGCGATGATG GGCGCCCCAC TCAACTGCCC AATGAAGTCG 1951 ATGCCGCTTT TCCCCTCGAG AATTCTACCG GGTAGGGGAG GCGCTTTTCC 2001 CAAGGCAGTC TGGAGCATGC GCTTTAGCAG CCCCGCTGGC ACTTGGCGCT 2051 ACACAAGTGG CCTCTGGCCT CGCACACATT CCACATCCAC CGGTAGCGCC 2101 AACCGGCTCC GTTCTTTGGT GGCCCCTTCG CGCCACCTTC TACTCCTCCC 2151 CTAGTCAGGA AGTTCCCCCC GCCCCGCAGC TCGCGTCGTG CAGGACGTGA 2201 CAAATGGAAG TAGCACGTCT CACTAGTCTC GTGCAGATGG ACAGCACCGC 2251 2301 TGAGCAATGG AAGCGGGTAG GCCTTTGGGG CAGCGGCCAA TAGCAGCTTT GCTCCTTCGC TTTCTGGGCT CAGAGGCTGG GAAGGGGTGG GTCCGGGGGC 2351 GGGCTCAGGG GCGGGCTCAG GGGCGGGGCG GGCGCGAAGG TCCTCCGGAG 2401 CCCGGCATTC TGCACGCTTC AAAAGCGCAC GTCTGCCGCG CTGTTCTCCT 2451 CITCCTCATC TCCGGGCCTT TCGACCGGAT CCGGCGATTA GTCCAATTTG 2501 TTAAAGACAG GATATCAGTG GTCCAGGCTC TAGTTTTGAC TCAACAATAT 2551 CACCAGCTGA AGCCTATAGA GTACGAGCCA TAGATAAAAT AAAAGATTTT 2601 ATTTAGTCTC CAGAAAAAGG GGGGAATGAA AGACCCCACC TGTAGGTTTG 2651

FIG. 1C

2701 GCAAGCTAGC TTAAGTAACG CCATTTTGCA AGGCATGGAA AAATACATAA CTGAGAATAG AGAAGTTCAG ATCAAGGTCA GGAACAGATG GAACAGGGTC 2751 GACCCTAGAG AACCATCAGA TGTTTCCAGG GTGCCCCAAG GACCTGAAAT 2801 GACCCTGTGC CTTATTTGAA CTAACCAATC AGTTCGCTTC TCGCTTCTGT 2851 TCGCGCGCTT CTGCTCCCCG AGCTCAATAA AAGAGCCCAC AACCCCTCAC 2901 TOGGGGCGCC AGTCCTCCGA TTGACTGAGT CGCCCGGGTA CCCGTGTATC 2951 CAATAAACCC TCTTGCAGTT GCATCCGACT TGTGGTCTCG CTGTTCCTTG 3001 GGAGGGTCTC CTCTGAGTGA TTGACTACCC GTCAGCGGGG GTCTTTCATT 3051 3101 TATGTGTCAT AAATATITCT AATTITAAGA TAGTATCTCC ATTGGCTTTC TACTITITET TITTATITIT TITTGTCCTC TGTCTCCATG TGTTGTTGTT 3151 GITGITIGIT IGITIGITIG TIGGITGGIT GGTTAATITT TITTTAAAGA 3201 TCCTACACTA TAGTTCAAGC TAGACTATTA GCTACTCTGT AACCCAGGGT 3251 GACCTIGAAG TCATGGGTAG CCTGCTGTTT TAGCCTTCCC ACATCTAAGA 3301 TTACAGGTAT GAGCTATCAT TTTGGTATAT TGATTGATTG ATTGATTGAT 3351 GTGTGTGTGT GTGATTGTGT TTGTGTGTGT GATTGTGTAT ATGTGTGTAT 3401 3451 3501 3551 

FIG. 1D

TTATGGTAGT GAGAGGCAAC GCTCCGGCCC AGGCGTCAGG TTGGTTTTTG 3601 AGACAGAGTC TITCACTTAG CITGAATTCT TGAAGACGAA AGGGCCTCGT 3651 GATACGCCTA TITTTATAGG TTAATGTCAT GATAATAATG GTTTCTTAGA 3701 CGTCAGGTGG CACTITICGG GGAAATGTGC GCGGAACCCC TATTTGTTTA 3751 TITITICTAAA TACATICAAA TATGTATCCG CTCATGAGAC AATAACCCTG 3801 ATAAATGCTT CAATAATATI GAAAAAGGAA GAGTATGAGT ATICAACATI 3851 TCCGTGTCGC CCTTATTCCC TTTTTTGCGG CATTTTGCCT TCCTGTTTTT 3901 GCTCACCCAG AAACGCTGGT GAAAGTAAAA GATGCTGAAG ATCAGTTGGG 3951 TGCACGAGTG GGTTACATCG AACTGGATCT CAACAGCGGT AAGATCCTTG 4001 AGAGTITICG CCCCGAAGAA CGTTTTCCAA TGATGAGCAC TTTTAAAGTT 4051 CIGCIATGIG GCGCGGTATI ATCCCGTGIT GACGCCGGGC AAGAGCAACT 4101 CGGTCGCCGC ATACACTATT CTCAGAATGA CTTGGTTGAG TACTCACCAG 4151 TCACAGAAAA GCATCTTACG GATGGCATGA CAGTAAGAGA ATTATGCAGT 4201 GCTGCCATAA CCATGAGTGA TAACACTGCG GCCAACTTAC TTCTGACAAC 4251 GATCGGAGGA CCGAAGGAGC TAACCGCTTT TTTGCACAAC ATGGGGGATC 4301 4351 ATGTAACTCG CCTTGATCGT TGGGAACCGG AGCTGAATGA AGCCATACCA AACGACGAGC GTGACACCAC GATGCCTGCA GCAATGGCAA CAACGTTGCG 4401 CAAACTATTA ACTGGCGAAC TACTTACTCT AGCTTCCCGG CAACAATTAA 4451 FIG. 1E

TAGACTGGAT GGAGGCGGAT AAAGTTGCAG GACCACTTCT GCGCTCGGCC 4501 4551 CITCCGGCTG GCTGGTTTAT TGCTGATAAA TCTGGAGCCG GTGAGCGTGG GTCTCGCGGT ATCATTGCAG CACTGGGGCC AGATGGTAAG CCCTCCCGTA 4601 4651 TCGTAGTTAT CTACACGACG GGGAGTCAGG CAACTATGGA TGAACGAAAT AGACAGATCG CTGAGATAGG TGCCTCACTG ATTAAGCATT GGTAACTGTC 4701 4751 AGACCAAGTT TACTCATATA TACTTTAGAT TGATTTAAAA CTTCATTTTT AATTTAAAAG GATCTAGGTG AAGATCCTTT TTGATAATCT CATGACCAAA 4801 ATCCCTTAAC GTGAGTTTTC GTTCCACTGA GCGTCAGACC CCGTAGAAAA 4851 GATCAAAGGA TCTTCTTGAG ATCCTTTTTT TCTGCGCGTA ATCTGCTGCT 4901 TGCAAACAAA AAAACCACCG CTACCAGCGG TGGTTTGTTT GCCGGATCAA 4951 GAGCTACCAA CTCTTTTCC GAAGGTAACT GGCTTCAGCA GAGCGCAGAT 5001 5051 ACCAAATACT GTCCTTCTAG TGTAGCCGTA GTTAGGCCAC CACTTCAAGA ACTICTGTAGE ACCGCCTACA TACCTCGCTC TGCTAATCCT GTTACCAGTG 5101 GCTGCTGCCA GTGGCGATAA GTCGTGTCTT ACCGGGTTGG ACTCAAGACG 5151 ATAGTTACCG GATAAGGCGC AGCGGTCGGG CTGAACGGGG GGTTCGTGCA 5201 CACAGCCCAG CITGGAGCGA ACGACCTACA CCGAACTGAG ATACCTACAG 5251 CGTGAGCTAT GAGAAAGCGC CACGCTTCCC GAAGGGAGAA AGGCGGACAG 5301 5351 GTATCCGGTA AGCGGCAGGG TCGGAACAGG AGAGCGCACG AGGGAGCTTC

FIG. 1F

CAGGGGAAA CGCCTGGTAT CTTTATAGTC CTGTCGGGTT TCGCCACCTC 5401 TGACTTGAGC GTCGATTTTT GTGATGCTCG TCAGGGGGGC GGAGCCTATG 5451 GAAAAACGCC AGCAACGCGG CCTTTTTACG GTTCCTGGCC TTTTGCTGGC 5501 CITITICATCA CATGITATII CATGATTAT CACCATGATTA TATAGATAAC 5551 CGTATTACCG CCTTTGAGTG AGCTGATACC GCTCGCCGCA GCCGAACGAC 5601 CGAGCGCAGC GAGTCAGTGA GCGAGGAAGC GGAAGAGCGC CTGATGCGGT 5651 ATTITICTCCT TACGCATCTG TGCGGTATTT CACACCGCAT ATGGTGCACT 5701 CTCAGTACAA TCTGCTCTGA TGCCGCATAG TTAAGCCAGT ATACACTCCG 5751 CTATCGCTAC GTGACTGGGT CATGGCTGCG CCCCGACACC CGCCAACACC 5801 CGCTGACGCG CCCTGACGGG CTTGTCTGCT CCCGGCATCC GCTTACAGAC 5851 AAGCTGTGAC CGTCTCCGGG AGCTGCATGT GTCAGAGGTT TTCACCGTCA 5901 TCACCGAAAC GCGCGAGGCA GCTGCGGTAA AGCTCATCAG CGTGGTCGTG 5951 AAGCGATICA CAGATGTCTG CCTGTTCATC CGCGTCCAGC TCGTTGAGTT 6001 TCTCCAGAAG CGTTAATGTC TGGCTTCTGA TAAAGCGGGC CATGTTAAGG 6051 GCGGTTTTTT CCTGTTTGGT CACTGATGCC TCCGTGTAAG GGGGATTTCT 6101 GTTCATGGGG GTAATGATAC CGATGAAACG AGAGAGGATG CTCACGATAC 6151 GGGTTACTGA TGATGAACAT GCCCGGTTAC TGGAACGTTG TGAGGGTAAA 6201 CAACTGGCGG TATGGATGCG GCGGGACCAG AGAAAAATCA CTCAGGGTCA 6251

FIG. 1G

ATGCCAGCGC TTCGTTAATA CAGATGTAGG TGTTCCACAG GGTAGCCAGC 6301 AGCATCCTGC GATGCAGATC CGGAACATAA TGGTGCAGGG CGCTGACTTC 6351 CGCGTTTCCA GACTTTACGA AACACGGAAA CCGAAGACCA TTCATGTTGT 6401 TGCTCAGGTC GCAGACGTTT TGCAGCAGCA GTCGCTTCAC GTTCGCTCGC 6451 GTATCGGTGA TTCATTCTGC TAACCAGTAA GGCAACCCCG CCAGCCTAGC 6501 CGGGTCCTCA ACGACAGGAG CACGATCATG CGCACCCGTG GCCAGGACCC 6551 AACGCTGCCC GAGATGCGCC GCGTGCGGCT GCTGGAGATG GCGGACGCGA 6601 TGGATATGTT CTGCCAAGGG TTGGTTTGCG CATTCACAGT TCTCCGCAAG 6651 6701 AATTGATTGG CTCCAATTCT TGGAGTGGTG AATCCGTTAG CGAGGTGCCG CCGGCTTCCA TTCAGGTCGA GGTGGCCCGG CTCCATGCAC CGCGACGCAA 6751 CGCGGGGAGG CAGACAAGGT ATAGGGCGGC GCCTACAATC CATGCCAACC 6801 CGTTCCATGT GCTCGCCGAG GCGGCATAAA TCGCCGTGAC GATCAGCGGT 6851 CCAGTGATCG AAGTTAGGCT GGTAAGAGCC GCGAGCGATC CTTGAAGCTG 6901 TOCCTGATGG TOGTCATOTA COTGCCTGGA CAGCATGGCC TGCAACGCGG 6951 GCATCCCGAT GCCGCCGGAA GCGAGAAGAA TCATAATGGG GAAGGCCATC 7001 CAGCCTCGCG TCGCGAACGC CAGCAAGACG TAGCCCAGCG CGTCGGCCGC 7051 CATGCCGGCG ATAATGGCCT GCTTCTCGCC GAAACGTTTG GTGGCGGGAC 7101 7151 CAGTGACGAA GGCTTGAGCG AGGGCGTGCA AGATTCCGAA TACCGCAAGC

FIG. 1H

GACAGGCCGA TCATCGTCGC GCTCCAGCGA AAGCGGTCCT CGCCGAAAAT 7201 GACCCAGAGC GCTGCCGGCA CCTGTCCTAC GAGTTGCATG ATAAAGAAGA 7251 CAGTCATAAG TGCGGCGACG ATAGTCATGC CCCGCGCCCCA CCGGAAGGAG 7301 CTGACTGGGT TGAAGGCTCT CAAGGGCATC GGTCGACGCT CTCCCTTATG 7351 CGACTCCTGC ATTAGGAAGC AGCCCAGTAG TAGGTTGAGG CCGTTGAGCA 7401 CCGCCGCCGC AAGGAATGGT GCATGCAAGG AGATGGCGCC CAACAGTCCC 7451 CCGGCCACGG GGCCTGCCAC CATACCCACG CCGAAACAAG CGCTCATGAG 7501 CCCGAAGTGG CGAGCCCGAT CTTCCCCCATC GGTGATGTCG GCGATATAGG 7551 CGCCAGCAAC CGCACCTGTG GCGCCGGTGA TGCCGGCCAC GATGCGTCCG 7601 GCGTAGAGCG CCACAGGACG GGTGTGGTCG CCATGATCGC GTAGTCGATA 7651 GTGGCTCCAA GTAGCGAAGC GAGCAGGACT GGGCGGCGGC CAAAGCGGTC 7701 GGACAGTGCT CCGAGAACGG GTGCGCATAG AAATTGCATC AACGCATATA 7751 GCGCTAGCAG CACGCCATAG TGACTGGCGA TGCTGTCGGA ATGGACGATA 7801 TCCCGCAAGA GGCCCGGCAG TACCGGCATA ACCAAGCCTA TGCCTACAGC 7851 ATCCAGGGTG ACGGTGCCGA GGATGACGAT GAGCGCATTG TTAGATTTCA 7901 TACACGGTGC CTGACTGCGT TAGCAATTTA ACTGTGATAA ACTACCGCAT 7951 TAAAGCTTTG CTTAGGAGTT TCCTAATACA TCCCAAACTC AAATATATAA 8001 GCATTIGACT TGTTCTATGC CCTAGGGGGA GGGGGGAAGC TAAGCCAGCT 8051 TITITITAACA TITAAAATGT TAATICCATT TIAAATGCAC AGATGTTTTT 8101
ATTICATAAG GGTTICAATG TGCATGAATG TCGCAATATC CTGTTACCAA 8151
AGCTAGTATA AATAAAAATA GATAAACGTG GAAATTACTT AGAGTTTCTG 8201
TCATTAACGT TICCTTCCTC AGTTGACAAC ATAAATGCGC TGCTGAGAAG 8251
CCAGTTTGCA TCTGTCAGGA TCAATTTCCA TTATGCCAGT CATATTAATT 8301
ACTAGTCAAT TAGTTGATTT TTGACATATA CATGTGAA

FIG. 1J

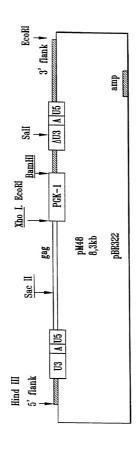


FIG. 2